

Part 1: SUMMARY OF PROJECT INFORMATION AND SPENDING									
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Agency Lead: Department of the Interior

Bureau

Account Title

Account Identification Code

PCAS Number

## Program Activity

Name of Project	Geospatial One-Stop
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This Project is:

New **X** Ongoing

Project/useful segment is funded:

Incrementally **X** Fully

Did the Executive/Investment Review Committee approve funding for This project this year?

Yes No **X**

Did the CFO review the cost goal?

Yes No **X**

Did the Procurement Executive review the acquisition strategy?

Yes No **X**

Is this project information technology?

Yes      **X**      No

For information technology projects only:

a. Is this Project a Financial Management System? (see section 53.2 for a definition)

Yes No **X**

If so, does this project address a FFMIA compliance area?

Yes No **X**

If yes, which compliance area?

b. Does this project implement electronic transactions or record keeping that is covered by the Government Paperwork Elimination Act (GPEA)?

Yes      **X**      No

If so, is it included in your GPEA plan (and does not yet provide an electronic option)?

Yes No **X**

Does the project already provide an electronic option?

Yes No **X**

c. Was a privacy impact assessment performed for this project?

Yes No **X**

d. Does the security of this project meet the requirements of the Government Information Security Reform Act (GISRA)?

Yes      **X**      No

See <http://www.fgdc.gov/fgdc/policies/privacypolicy.pdf>

Were any weaknesses identified for this project in the annual program review or independent evaluation?

Yes No **X**

## PROJECT DESCRIPTION

This initiative is one of the 22 egovernment initiatives selected by the President's Management Council (PMC). It will significantly enhance the implementation of egovernment by making geospatial data more accessible and usable. Geospatial data identifies the geographic location and characteristics of natural or constructed features and boundaries on the Earth. The Geospatial One-Stop project will accelerate the development of the National Spatial Data Infrastructure (NSDI), technology, policies, and standards that support "one-stop" access to the federal government's spatial data assets. The Geospatial One-Stop project will benefit all spatial data customers including federal, state and local governments, other governments, as well as the private citizen by providing a common, consistent source of spatial data. The project is comprised of the following five components:

1. Develop and implement data standards for NSDI Framework Data and other high priority data themes, as agreed;
2. Fulfill and maintain an operational inventory based on standardized documentation, using the Federal Geographic Data Committee (FGDC) Metadata Standard, of Federal NSDI Framework Data and publish the metadata records in the NSDI Clearinghouse network;
3. Publish, in the NSDI Clearinghouse network, metadata for planned acquisition and update activities of Federal NSDI Framework Data;
4. Prototype and deploy data access and Web mapping services for Federal NSDI Framework Data and other priority data, as agreed; and
5. Establish a comprehensive federal portal to the resources described above in bullets 1-4 (standards, priority data, planning information, and products and services) as a logical extension to the NSDI Clearinghouse network.

The Office of Management and Budget (OMB) Information Initiative (I-Team) addresses investment policies and activities that align resources to identify and implement efficient and effective business processes for the collection, maintenance, and distribution of data. The Geospatial One-Stop project team will work in close coordination with the I-Team to ensure quality, shareable spatial data online.

## PART II: JUSTIFICATION AND OTHER INFORMATION

Many studies have revealed that about 80-90% of all government information has a geographic or spatial data component, meaning it can be tied to specific place (for example: area code, latitude and longitude, street address, zip code). In 1998, the National Academy of Public Administration estimated that \$3.56 trillion is directly related to spatial data. Today there is a wealth of geographic data available from federal, state, county, local and tribal governments, academic institutions, and private sector organizations. However, it is collected to serve specific missions in different formats and standards, and either poorly documented or undiscoverable. The result is inefficient use of resources, potential duplication, inconsistency, incompatibility, and the inability to maximize the value of its data resources. Geospatial One-Stop seeks to improve the use of standards and a clearinghouse network across all federal programs. Standards document agreements containing technical specifications or other precise criteria to be used consistently as rules, guidelines, or definitions of characteristics to ensure that materials, products, processes, or services are fit for their purposes. Through a clearinghouse, users can draw on a single interface to search and access data. A clearinghouse is a distributed network of data producers, managers, and users linked electronically over the Internet. Geospatial One-Stop will demonstrate the economies of scale available by transforming institutional legacies of stove-piped, incompatible spatial data into a robust geospatial solution for egovernment. Such co-investments and bulk procurement savings are powerful incentives to make spatial data accessible on the NSDI Clearinghouse network, and to participate in the development of framework standards.

Delivery of e-government services will be greatly improved when they are supported by data and tools that enable them to be requested and provided geographically. Applications ranging from homeland security, emergency management, and disaster response to economic development, natural resource stewardship, public safety, transportation planning, management of invasive species, zoning decisions, and disease management depend upon accurate and timely geographic data. Geographic data themes are electronic records and coordinates for a topic or subject, such as elevation, vegetation, or hydrography. While specific applications of geographic data vary greatly, users have a recurring need for seven basic themes of data that are the foundation or framework for almost all applications. Each of the seven data themes is presented below with the lead agency, as denoted in the draft OMB Circular A-16. These lead agencies will be active partners of the Geospatial One-Stop project.

- **Digital orthoimagery** (Department of Interior (DOI) – United States Geological Survey (USGS)): This dataset contains geo-referenced images of the Earth's surface, collected by a sensor. Digital orthoimages have the geometric characteristics of a map and image qualities of a photograph.
- **Cadastral data** (DOI – Bureau of Land Management (BLM)): This dataset describe the geographic extent of past, current, and future right, title, and interest in real property, and the framework to support the description of that geographic extent. The geographic extent includes survey and description frameworks such as the Public Land Survey System, as well as parcel-by-parcel surveys and descriptions.
- **Geodetic control** (Department of Commerce (DOC) – National Geodetic Survey (NGS)): Geodetic control provides a common reference system for establishing coordinates for all geographic data.
- **Elevation** (DOI – USGS and DOC – National Oceanic and Atmospheric Administration (NOAA)): This data contains geo-referenced digital representations of terrestrial surfaces, natural or manmade, which describe vertical position above or below a datum surface.
- **Hydrography** (DOI – USGS): This data theme includes surface water features such as lakes, ponds, streams, rivers, canals, oceans, and coastlines.
- **Transportation** (Department of Transportation (DOT) – Bureau of Transportation Statistics (BTS)): Transportation data are used to model the geographic locations, interconnectedness, and characteristics of the transportation system within the United States. The transportation system includes both physical and non-physical components representing all modes of travel that allow the movement of goods and people between locations.
- **Government units** (DOC – United States Census): These data describe, by a consistent set of rules and semantic definitions, the official boundary of federal, state, local, and Tribal governments.

The following federal agencies are also crucial in this project:

- National Aeronautics and Space Administration (NASA),
- Environmental Protection Agency (EPA),
- Federal Emergency Management Agency (FEMA),
- United States Department of Agriculture (USDA) – National Resources Conservation Service (NRCS), and
- Department of Defense (DoD) – National Imagery and Mapping Agency (NIMA)

Geospatial One-Stop will improve access to standardized framework data held by governments at all levels, academic institutions, private sector entities, and other organizations. Framework data includes a minimal number of attributes needed to identify and describe the features. Furthermore, establishing reliable and standardized framework data services on the Web, will foster the production of seamless, nationally consistent geographic information that is collected once, and shared many times. In so doing, it will enable organizations at the federal, state, and local levels to share production and maintenance of data to satisfy common data needs, and serve as a foundation or infrastructure for other e-government initiatives.

States and local governments have long sought the ability to co-invest and participate with federal agencies on the development of and access to framework data. At present this is achieved on an ad-hoc basis. The development of a searchable database, using FGDC metadata and the NSDI Clearinghouse network, will

enable governments at all levels, and the private sector, to identify all federal agency data collection plans through a single portal. Metadata is information about data, such as content, source, vintage, accuracy, condition, projection, responsible party, contact telephone number, method of collection, and other characteristics or descriptions. Metadata is critical to preserve and protect agencies' spatial data assets. Reliable metadata, structured in a standardized manner, are essential to ensuring that geospatial data are used appropriately, and that any resulting analysis is credible. Metadata also can be used to facilitate the search and access of data sets or geospatial services within a clearinghouse. This would allow state and local governments, many of whom are aggressively using the NSDI Clearinghouse network, to coordinate data acquisition strategies with the federal government, and to manage their data activities more efficiently and effectively.

Federal agencies are relying more and more on state and local partners, and the private sector, to fulfill their geospatial data needs. At the same time, state and local governments, and the private sector, are clamoring for federal leadership in unifying and simplifying data life cycle processes, and addressing the institutional and financial barriers to aligning their spatial data efforts. The FGDC is well positioned to provide this leadership. It leads and supports the NSDI strategy and national spatial data policy development and includes 17 executive-level agencies, including the:

- Department of Agriculture (USDA)
- Department of Commerce (DoC)
- Department of Defense (DoD)
- Department of Energy (DoE)
- Department of Health and Human Services (HHS)
- Department of Housing and Urban Development (HUD)
- Department of the Interior (DOI)
- Department of Justice (DOJ)
- Department of State (DoS)
- Department of Transportation (DoT)
- Environmental Protection Agency (EPA)
- Federal Emergency Management Agency (FEMA)
- Library of Congress (LOC)
- National Archives and Records Administration (NARA)
- National Aeronautics and Space Administration (NASA)
- National Science Foundation (NSF)
- Tennessee Valley Authority (TVA)

The FGDC also engages a growing network of non-federal stakeholders for addressing geospatial data needs. Important national stakeholders include the:

- Intertribal GIS Council (IGC),
- National States Geographic Information Council (NSGIC),
- National Association of Counties (NACo),
- National League of Cities (NLC),
- International City/County Managers Association (ICMA),
- Open GIS Consortium (OGC),
- University Consortium for Geographic Information Sciences (UCGIS), and
- Over 30 Individual State GIS Councils.

Each of these organizations has played an important role in working strategically with the FGDC in developing the NSDI. To the maximum extent practicable, Geospatial One-Stop will solicit, support, and leverage the interest, capabilities, and efforts of participants to develop consensus national standards that will meet the needs of the entire community, and be widely accepted and implemented. The NSDI Clearinghouse network and portal will be designed to encourage maximum participation of data partners from all levels of government and the private sector.

The FGDC has stewarded the development of 16 data standards and is participating with international organizations, like the International Standards Organization (ISO), in the creation of emerging global standards. Federal agencies are required to make spatial data comply with existing FGDC standards and available to the public. However, federal agencies typically have not factored metadata and standards compliance into the cost of data management, resulting in the production of program-oriented data that does not comply with standards and is not readily accessible to the public.

Geospatial One-Stop addresses the need for interoperable standards that can be implemented in commercial products that meet state and local needs and are aligned with FGDC, emerging ISO, and other international standards. The FGDC will lead a framework standards development effort to build national consensus on standard core content for each of the framework themes. The project will result in the publication and community adoption of specific framework core data models conforming to industry technology standards and specifications, and promoting interoperability of framework data themes. These essential models will support systematic data collection among framework data partners. The community will also evaluate and recommend adoption of relevant standards for accessing and serving geospatial framework data online. Agencies will be responsible for providing geographic data services for federally held framework data collections online, conforming to these standard content and service methodologies.

Geospatial One-Stop will inventory existing or legacy framework data. This data will be consolidated into the NSDI Clearinghouse network providing a "one-stop" to identify current spatial data held by, or on behalf of, federal agencies, as well as other relevant FGDC-compliant data held by non-federal agencies and other organizations. Interoperability tools will be developed to migrate legacy data to the approved NSDI Framework Data standards. A pilot study will be developed to test and evaluate an information discovery, navigation, mapping, and access Web portal, as an extension to the NSDI Clearinghouse network. Based on the pilot study results, a comprehensive Web portal will be developed and deployed so that state and local governments, the private sector, and the general public will have one-stop access to standardized government spatial data. After initial deployment of the comprehensive Web portal, reusable, commercial replication services will be required to provide 24X7, trusted data services.

The Geospatial One-Stop project supports the overall plan of e-government and existing principles of the NSDI established in Executive Order 12906 and OMB Circular A-16. Furthermore, it addresses long-standing OMB objectives to improve data quality, and reduce burden by maximizing the benefits of technology. The Geospatial One-Stop project will be supported by the efforts of I-Teams, assuring that the data being produced and maintained for all interested partnerships and consortia can meet the multi-jurisdictional business needs of all stakeholders.

***A-2) How does this investment support a core or priority function of your agency or the Federal government?***

Geospatial One-Stop focuses on the Presidential priority to improve the use of e-government by making geospatial data available to the federal, state, and local governments, and the public. This multi-agency initiative is established under and aligned with various public law and policy provisions (Information Technology Management Reform Act (ITMRA), Government Performance Results Act (GPRA), Paperwork Reduction Act (PRA), Intergovernmental Cooperation Act), Executive Order 12906, and it is also aligned with OMB Circular A-16, Public Law 44 USC 3511, OMB Circular A-130, OMB Memorandum 98-5, and a variety of other policies relating to the management of government information.

***A-3) Is this investment included in your agency's annual performance plan or multiple agency annual performance plans?***

Upon approval, each agency impacted by Geospatial One-Stop will create and adopt a strategy to include performance measures in its Annual Performance Plan, and monitor and track these metrics to comply with GPRA.

**A-4) Are there any alternative sources, in the public or private sectors that could perform this function? If so, explain why your agency did not select one of these alternatives.**

No, a balance of public and private sector capabilities and networks will be used to create the enabling mechanisms of the Geospatial One-Stop project. Open data standards, clearinghouses for government data, and other parts of the Geospatial One-Stop remove public data infrastructure constraints. The geospatial community has not developed tools, and has regularly called for and supported federal leadership of initiatives to overcome these constraints.

**A-5) How will this investment reduce costs or improve efficiencies?**

In 1993, OMB performed a data call in which it estimated that \$4.1 billion was spent annually, at the federal level, on collection and management of geographic referenced data. In addition, state and local governments are estimated to spend twice that of the federal government on collection and management of geographic referenced data. The Geospatial One-Stop project will reduce the costs associated with the management of geospatial data by improving the efficiencies in which it is acquired, accessed, and used across multiple federal, state, and local governments, and the public.

Geospatial One-Stop will accelerate the cost efficiencies and reduction of duplication. The government delivers services through a series of interdependent, nested business processes with other governments, across agencies, with private sector contractors and for private sector consumers. Location-aware services can be better organized, built, and funded in light of local needs, capacities, and supplemental resources. Complex problems, adaptive management, and innovative regulatory and public-private partnerships require a common set of lenses. A shared map of all relevant factors, stakeholders, and local assets and programs capable of being leveraged in near real-time, and lets agencies avoid duplication, waste, and gaps. Geospatial One-Stop:

- Increases consistency, quality, reliability, and reuse of spatial data.
- Provides standard data more rapidly and at less cost.
- Provides consistent and accessible nationwide data to prioritize, implement, and adapt federal programs for local benefit.
- Improves efficiency of coordinating intergovernmental and private sector efforts.
- Provides more accountable performance and results-oriented management.
- Improves citizen involvement in the digital democracy, thereby improving program accountability and performance.
- Supports demand for interoperability and functionality in technologies and drives domestic and international sales.

**B. Program Management**

**1. Is there a program manager assigned to the project? If so, what is their name?** FGDC – John Moeller

Yes    **X**    No

**2. Is there a contracting officer assigned to the project?**

Pending approval.

Yes                      No    **X**

**3. Sponsor / Owner:**

Department of the Interior – Scott Cameron

Yes    **X**    No

**C. Acquisition Strategy**

***C-1) Will you use a single contract or several contracts to accomplish this project? If multiple contracts are planned, explain how they are related to each other, and how each supports the project performance goals.***

Multiple agencies will participate in the Geospatial One-Stop by delivering and/or maintaining data and information generated by their organizations, which then become accessible to all users. Due to its collaborative nature, the Geospatial One-Stop will use multiple mechanisms to formalize the roles to be played by partners and contractors. It is expected that the following services will be acquired for this project:

- Data Modelers,
- Facilitators,
- Framework Data Theme Managers,
- Industry Partners for Test Beds and Interoperability Tools,
- Outreach Personnel, and
- Overall Project Management.

This project anticipates using government resources to their fullest extent where there are existing capabilities and expertise to minimize redundant effort. However, where it is anticipated that there is a lack of existing capabilities and expertise, the project staff will utilize contractor support and will determine the most appropriate government service contract depending on the work to be performed, and how it will be executed.

***C-2) What type(s) of contract will you use (e.g. cost reimbursement, fixed-price, etc.)?***

This project has not determined what type of contracts it will use in order to complete its objectives. However, it can be assumed that the project will use existing, fixed-price, performance-based government service contracts.

***C-3) Will you use financial incentives to motivate contractor performance (e.g. incentive fee, award fee, etc.)?***

Yes, this project may use financial incentives, where necessary, to ensure contractor performance.

***C-4) Will you use competition to select suppliers?***

Yes, suppliers will be competitively selected through existing government service vehicles.

***C-5) Will you use commercially available or COTS products, or custom-designed products?***

Yes, it is anticipated that the Geospatial One-Stop will use commercial off-the-shelf (COTS) products. However, there may be times when the interfaces needed to make individual COTS products work together in a seamless suite must be custom-designed. FGDC has historic, innovative relationships with the premier industry, interoperability standards organizations (such as Open GIS Consortium) that improves the interoperable functionality of COTS products (software, hardware, and location-aware Web services). Such relationships reduce federal technology risks and leverage private sector technology demand.

**D. Alternatives Analysis and Risk Management**

***D-1) Describe the alternatives you considered for supporting your on-going project***

**Background**

Two alternatives have been identified: the status quo and the Geospatial One-Stop. Alternatives include a

mix of contractor, private sector, and government performance requirements. Both alternatives require partnerships, interaction, and active involvement of other levels of government, private sector, and others with federal agencies. This joint participation will be a fundamental component of both alternatives. No other feasible alternatives were considered within the scope of this analysis given the federal policy restraints encompassed by OMB Circular A-16 and Executive Order 12906.

#### Alternative 1 – Status Quo

##### *Description:*

The status quo revolves around compliance with project goals subject to agency requirements and priorities over an extended period of time. In general, the current practices include:

- Developing and implementing NSDI Framework Standards as time permits.
- Inventorying and documenting NSDI Framework Data on an ad-hoc basis.
- Lacking documentation of data collection plans for federal Agencies.
- Establishing Web mapping and data services as resources permit.
- Transitioning the NSDI Clearinghouse network that provides limited access to geospatial data and services from participating federal agencies to a more robust portal as resources permit.

##### *Benefits:*

- Provides individual NSDI Framework Standards.
- Requires little or no organizational change.
- Reduces risk – efforts will proceed with known limitations.
- Incurs no additional cost.

Limitations	Consequences
Will not provide a full suite of NSDI Framework Data Standards	Continued costly, redundant, slow data collection processes
Will not provide for seamless coverage of NSDI Framework nationally	Inadequate data sharing across federal, state, and local organizational boundaries
Will only provide data documentation (metadata) for a portion of the NSDI Framework Data	Stakeholders will lack “one-stop” for data access
Will not provide plans from federal agencies and will not take advantage of many data collection collaborative opportunities that may exist	Less leveraging of partnerships and stakeholder activities
Will not explore and define the full potential of the capability that can be built upon the current NSDI Clearinghouse network	Slower implementation of Web mapping and Web services
Does not take advantage of e-government needs for geospatial data	Disparate use of geospatial data

#### Alternative 2 – Proposed Alternative

##### *Description:*

The Geospatial One-Stop will accelerate the implementation of OMB Circular A-16 and Executive Order 12906, in support of e-government requirements. Proposed components include:

- Development and implementation of standards for seven NSDI Framework Data themes.
- Inventory and documentation of all federal agency NSDI Framework Data themes.
- Documentation of data collection plans for the federal agencies.
- Establishment of Web mapping and online data services for all NSDI Framework Data themes to meet general requirements of government and citizen users.



- Implementation of a Web portal as an extension to the NSDI Clearinghouse network that provides access to data applications, programs and products from all federal agencies.
- Information is available on federal agency plans for data acquisitions.

Benefits	Results
Will provide a full suite of integrated NSDI Framework Data standards	Uniform, common data that is easily shared
Will provide metadata records for NSDI Framework Data available from the federal government	Partners and stakeholders will know what data exists, which should result in reduced duplication of data collection
Will provide plans from all federal agencies and the opportunity to establish data collection collaborative projects that will improve effectiveness, efficiency, and reduce duplication	Partners and stakeholders will know what data collection plans exist, which should provide opportunities for collaboration and partnerships
Will define the full potential of the capability that can be built upon the current NSDI Clearinghouse network	Makes effective use of existing access and discovery infrastructure
Will provide a Web portal for geospatial resources	Allows "one-stop" to geospatial data
Will build upon existing capability and using private sector partners in an open systems test-bed environment	Increases Web mapping functionality and visualization
Best mix of benefits and cost	Facilitates use of e-government practices to streamline current processes and reduce future costs

*Limitations:*

- Will require concerted attention and commitment of federal agencies, the FGDC, and support from many non-federal partners.

Summary

Alternative 2, the proposed alternative, is a substantial commitment in accelerating the development of NSDI and in implementing new e-government practices. Through the Geospatial One-Stop project, major steps will be taken to ensure that the federal government provides necessary leadership through collaborative efforts to develop useful framework data standards and provide a single, online access point to geospatial data. This project provides a clear focus of the geospatial component fundamental for successful e government. Additionally, it leverages the investments and data resources of government, academia, and the private sector.

***D-2) Describe the results of the feasibility/performance/benefits analysis for the alternatives identified in D-1.***

A feasibility/performance/benefit analysis has not yet been performed due to the short timeframe and complex multi-agency nature of the project. The Geospatial One-Stop will propose a data call issued by OMB in cooperation with FGDC for each agency to determine the dollar value of information by category of framework data, as well as the dollar value of each data collection effort that is in compliance with existing FGDC standards.

***D-3) Summarize the results of your life-cycle cost analysis performed for each investment and the***

***underlying assumptions.***

Accurate cost information is not available for all of the impacted agencies. Upon approval, all agencies will prepare detailed cost estimates for the life cycle of its plans. It will be the ultimate responsibility of each agency, with oversight from FGDC, to ensure costs are accurate and the performance of the budget is tracked. I-Teams, through the FGDC, are exploring life cycle costs.

***D-4) For IT, explain replaced system savings and savings recovery schedule.***

As spatial data systems age, the opportunity arises to connect to legacy data through interoperable interfaces. Several agencies have identified cost savings that would result from replacement or redesign of their spatial data systems (i.e., Census' TIGER Modernization, USGS' National Map, and FEMA's Flood Map Modernization) that utilize local data. Through the use of interoperability tools, the Geospatial One-Stop will enable the migration of legacy data from stove-piped, single-agency systems to a common federal Web portal that will be widely used by the geospatial community and the public at large.

***D-5) Are there any quantitative benefits that will be achieved through this investment (e.g., systems savings, cost avoidance, stakeholder benefits, etc)?***

Yes, after approval of the initiative and information is secured from a new OMB data call, quantitative benefits will be defined for the federal government, other governments, and the public.

***D-6) Describe the results of your risk assessment for this project and discuss your plans to eliminate, mitigate, or manage identified risks (e.g., financial, acquisition, technical).***

<b>Risk Assessment Area</b>	<b>Mitigation/Contingency Plan</b>
<b>Strategic Risks:</b> <ul style="list-style-type: none"><li>• The sharing of geospatial data depends on that data being well-documented, yet such documentation processes are not widely integrated into routine agency business processes</li><li>• There are political and evolving issues with respect to the responsibilities of federal government and other stakeholders such as the pending revision of OMB Circular A-16</li><li>• Perspectives of the various stakeholders in the NSDI are difficult to reconcile in areas such as how much the government should be constrained to "raw data access" rather than publishing "finished products" that might instead be provided by commercial vendors</li></ul>	<b>Strategic Risk Mitigation:</b> <ul style="list-style-type: none"><li>• Deploy mechanisms that leverage existing business processes, such as the agency's planning and production databases, to automatically generate Clearinghouse records</li><li>• Make project processes and systems flexible as to the diverse and changing roles of the various stakeholders; design systems to be useful even if partially implemented</li><li>• Candid discussions of concerns among all stakeholders must be aired and policy officials must make a clear and public case for whatever decisions are made; government participants will emphasize use of "standards-based Commercial Off-the-shelf Software" products</li></ul>
<b>Technical Risks:</b> <ul style="list-style-type: none"><li>• Consensus on standards for some NSDI Framework Data resources may prove to be elusive, even with an actively supported consensus process among stakeholders</li><li>• Perception of NSDI may be strongly determined by early adopters, occasionally serving to dissuade participation by less actively involved stakeholders</li><li>• An agency having the lead role for a NSDI</li></ul>	<b>Technical Risk Mitigation:</b> <ul style="list-style-type: none"><li>• NSDI Framework Data content is defined at an adequate level of detail by the stakeholders to facilitate exchange of data and linkages between systems as a 'least common denominator'</li><li>• Emphasize education, outreach, and active involvement among all stakeholders throughout all aspects of the project</li><li>• Implement processes that support and</li></ul>

Framework Data resource may simply formalize an agency practice rather than develop an authentic consensus among stakeholders	encourage open interchange among stakeholders, both within and across all NSDI Framework Data specialization; leverage the role that OMB has reasserted in stewarding cross-agency engagement in the standards process
<b>Financial Risks:</b> <ul style="list-style-type: none"> <li>Because the benefits of interoperable interfaces accrue primarily to external users, an agency is inclined to deploy a cheaper, agency-specific and non-interoperable solution (an issue common to most standards adoption situations)</li> </ul>	<b>Financial Risk Mitigation:</b> <ul style="list-style-type: none"> <li>The additional cost of the interoperable interface should be funded by a source for which the benefits are apparent, e.g., inter-agency funding source such as Congress and OMB</li> <li>OMB will only fund data acquisition projects that are in compliance with FGDC standards</li> </ul>
<b>Project Management Risks:</b> <ul style="list-style-type: none"> <li>The project goal is predicated on dealing with a high degree of complexity and diversity across the NSDI Framework Data themes and the various sets of stakeholders</li> </ul>	<b>Project Management Risk Mitigation:</b> <ul style="list-style-type: none"> <li>Educate and encourage a high level of ongoing information exchange; Implement many pilots and other demonstration sub-projects to build confidence that the processes and systems work and do scale to the overall project objectives</li> </ul>
<b>Change Management Risks:</b> <ul style="list-style-type: none"> <li>Agencies may be unwilling to adopt FGDC Framework Data standards and up-keep data</li> <li>Lack of accountability for agency participation could result in undefined partner roles and responsibilities</li> </ul>	<b>Change Management Risk Mitigation:</b> <ul style="list-style-type: none"> <li>Maximize the use of interoperability tools to adopt the FGDC Framework Data standards</li> <li>OMB must enforce OMB Circular A-16 and the adoption of approved Framework Data standards</li> <li>Upon approval, create a detailed project plan that defines partnering agencies roles and responsibilities</li> </ul>

The following table identifies the overall level of risk for each risk category:

Category	Rating
Strategic Risk	Medium
Technology Risk	Low
Financial Risk	High
Project Management Risk	Low
Change Management Risk	High

A detailed risk assessment process is described in section F-2 and will be fully developed in the final draft to OMB in December.

## E. IT Modernization and Architecture (IT Projects Only)

### *E-1) Is this project identified in your agency's enterprise architecture? If not, why?*

No, the Geospatial One-Stop represents an IT architecture that should guide agencies' individual IT architectures. The FGDC is exploring the creation of a technical reference model for NSDI implementation

and linkage to technical specifications and data standards for interoperability. For example, the IT architecture for the NSDI Clearinghouse network has specific interoperability requirements that support the federal concept of an IT architecture.

***E-2) Explain how this project conforms to:  
a) your agency's enterprise architecture; and***

See Section E-1.

***b) the Federal Enterprise Architecture Framework (FEAF), if used for this project. If you are not following the FEAF, explain why and describe the framework you are using.***

The Geospatial One-Stop project will support the integrated government-wide business architecture.

**F. Security and Privacy (IT projects only)**

***F-1) demonstrate that the costs of security controls are understood and are explicitly incorporated in the life-cycle planning of the overall system, including the additional costs of employing standards and guidance more stringent than those issued by NIST;***

There are no identified security concerns associated with the Geospatial One-Stop project. As the project evolves, a security plan will be identified. It is anticipated that there will be no additional security costs.

***F-2) demonstrate how the agency ensures that risks are understood and continually assessed;***

A detailed risk management process will be implemented where risks from identified categories (Part II: Section D-2) are identified and documented. The risks will be linked to project goals and objectives. A project approach will be established with a trigger point denoting the point at which a risk occurs. Each risk will have an impact and probability of occurrence that will be monitored by the Project Manager. Finally, a mitigation strategy is included to reducing the probability of risk occurrence. FGDC will meet quarterly to track progress and address emerging issues.

***F-3) demonstrate how the agency ensures that the security controls are commensurate with the risk and magnitude of harm;***

Identified risks are assigned an impact and probability rating to determine its magnitude of harm with relationship to the probability of occurrence.

***F-4) identify additional security controls for systems that promote or permit public access, other externally accessible systems, and those that are interconnected with systems over which program officials have little or no control;***

The Geospatial One-Stop project will promote and permit public access, link externally accessible systems, and link systems over which the project manager does not have control. However, it is not the creation of a new architecture or environment. Its security controls conform to the NSDI, was established under and aligned with various public law and policy provisions. Executive Order 12906 established the NSDI, and it is also aligned with OMB Circular A-16, public law 44 USC 3511, OMB Circular A-130, OMB Memorandum 98-5, and a variety of other policies relating to the management of government information. The NSDI has been developing over the past seven years, enhancing the ability of geospatial users and providers to collection share and use geographic information more effectively, efficiently, and securely. The metadata and other elements of the NSDI enhance the administration and implementation of security processes for enterprises that depend on authentic and timely spatial data support.

***F-5) demonstrate how the agency ensures the effective use of security controls and authentication tools to protect privacy for those systems that promote or permit public access; and***

FGDC members have adopted a privacy policy for spatial data that is based upon existing public law and policy. FGDC Policy on Access to Public Information and the Protection of Personal Information Privacy in Federal Geospatial Databases, dated April 1998, outlines this policy (<http://www.fgdc.gov/fgdc/policies/privacypolicy.pdf>). Additionally, a Privacy Impact Assessment process is planned. An assessment is expected by the end of calendar year 2001.

The Geospatial One-Stop project will use security controls and authentication tools to protect privacy. Its security controls conform to the NSDI, was established under and aligned with various public law and policy provisions. Executive Order 12906 established the NSDI, and it is also aligned with OMB Circular A-16, public law 44 USC 3511, OMB Circular A-130, OMB Memorandum 98-5, and a variety of other policies relating to the management of government information. The NSDI has been developing over the past seven years, enhancing the ability of geospatial users and providers to collection share and use geographic information more effectively, efficiently, and securely. The metadata and other elements of the NSDI enhance the administration and implementation of privacy concern processes for enterprises that depend on authentic and timely spatial data support.

***F-6) demonstrate how the agency ensures that the handling of personal information is consistent with relevant government-wide and agency policies.***

The Geospatial One-Stop project conforms to the NSDI, was established under and aligned with various public law and policy provisions. Executive Order 12906 established the NSDI, and it is also aligned with OMB Circular A-16, public law 44 USC 3511, OMB Circular A-130, OMB Memorandum 98-5, and a variety of other policies relating to the management of government information. The NSDI has been developing over the past seven years, enhancing the ability of geospatial users and providers to collection share and use geographic information more effectively, efficiently, and securely. The metadata and other elements of the NSDI enhance the administration and implementation of privacy concern processes for enterprises that depend on authentic and timely spatial data support.

**G. Government Paperwork Elimination Act (GPEA) (IT Projects Only)**

***G-1) If this project supports electronic transactions or record-keeping that is covered by GPEA, briefly describe the transaction or record-keeping functions and how this investment relates to your agency's GPEA plan.***

After the Geospatial One-Stop project has been approved, each effected agency will determine whether the electronic transactions and record keeping functions are covered by its GPEA Plan. Where agencies are not in compliance, the GPEA Plan will be updated.

***G-2) Identify any OMB Paperwork Reduction Act (PRA) control numbers from information collections that are tied to this investment.***

After the Geospatial One-Stop project has been approved, each effected agency will identify all OMB Paper Elimination Act control numbers from information collections that are tied to the project.

<b>PART III: COST, SCHEDULE AND PERFORMANCE GOALS</b>
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**A. Description of performance-based system (PBMS):**

*Which performance-based management system will you use to monitor and manage contract or project progress?*

As a result of the involvement of multiple agencies, there has not been a single performance-based management system identified for use for Geospatial One-Stop. Currently, the project is using Microsoft Project and Excel to formulate project schedule and budget. The project will identify a single Project Manager, with appropriate authority, and will use the FGDC Steering Committee to meet, as necessary, and act as representatives for the agencies involved.

Once the project begins, the project manager will continue to use Microsoft Project and Excel to track schedule and budget. Project performance will be reported quarterly to the FGDC Steering Committee, the Department of Interior, OMB representatives, and ultimately the President's Management Council (PMC). In addition, if the project schedule or budget deviates  $\pm 10\%$  from the established baseline, the Project Manager will report this to OMB along with corrective actions.

**B. Original baseline (OMB-approved at project outset):**

*Using the format of your selected PBMS, provide the following:*

***B-1) What are the cost and schedule goals for this segment of phase of the project (e.g., what are the major project milestones or events; when will each occur; and what is the estimated cost to accomplish each one)?***

	<b>Cost and Schedule Goals</b>		
<b>Phase/Milestone Description</b>	<b>Schedule</b>		<b>Duration</b>
	<b>Start Date</b>	<b>End Date</b>	<b>Days</b>
<b>FY 2002</b>			
<b>1</b> – Requirements Analysis	01/02	01/02	30
<b>2</b> – Inventory existing data for framework data collection discoverable through Clearinghouse	01/02	05/02	150
<b>3</b> – Inventory planned data for framework data collection discoverable through Clearinghouse	01/02	07/02	210
<b>4</b> – Development of working draft NSDI Framework Standards	02/02	09/02	240
<b>FY 2003</b>			
<b>1</b> – Development of Committee draft NSDI Framework standards	10/02	01/03	120
<b>1</b> – Standards approval	02/03	05/03	120
<b>4</b> – Web mapping and data access standards	10/02	05/03	240
<b>4</b> – Interoperability tools	01/02	01/03	390
<b>4</b> – Pilot services integration	10/02	11/02	60

5 – Reusable, commercial replication services for Web portal	06/03	09/03	90
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**B-2) What are the measurable performance benefits or goals for this segment of phase of this project (e.g., what are the measurable performance improvements or efficiencies that you expect to achieve with this project)?**

- Completed and deployed standards for framework data themes.
- Published planned spatial data activities and working with state and local to reduce overlapping efforts.
- Single Web site with standardized data.
- Eliminate redundant, non-standard data collection.

**C. Current baseline (applicable *only* if OMB approved the changes):**

*Using the format of your selected PBMS, provide the following:*

**C-1) What are the cost and schedule goals for this segment of phase of the project (e.g., what are the major project milestones or events; when will each occur; and what is the estimated cost to accomplish each one)?**

	Cost and Schedule Goals			
Phase/Milestone Description	Schedule		Duration	Planned Cost (000)
	Start Date	End Date	Days	

**C-2) What are the measurable performance benefits or goals for this segment of phase of this project (e.g., what are the measurable performance improvements or efficiencies that you expect to achieve with this project)?**

**D. Actual Performance and Variance from OMB approved baseline (Original or Current):**

**D-1) Actual cost and schedule performance. Using the information from your PBMS, explain:**

**a) What work you planned (scheduled) to accomplish and how much you budgeted to complete the work.**

	Planned				Actual			
Phase/Milestone Description	Schedule		Duration	Planned Cost	Schedule		Percent Complete	Actual Cost
	Start Date	End Date	Days		Start Date	End Date		

**b) What work you actually accomplished and how much you actually spent.**

N/A

***D-2) Cost and schedule variance. If either the actual work accomplished or costs incurred vary from your baseline goals by 10 percent or more, explain:***

***a) The variance between planned and actual costs or planned and actual schedule, expressed as a percentage of the baseline goal.***

N/A

***b) The reason for the variance.***

N/A

***D-3) Performance variance. Explain whether, based on work accomplished to date, you still expect to achieve your performance goals. If not, explain the reasons for the variance.***

N/A

**E. Corrective actions:**

***If actual work accomplished or costs incurred to date vary from the planned baseline goals by 10 percent or more, explain:***

***a) What you plan to do, if anything, to correct project performance.***

N/A

***b) What effect your action will have on overall project cost, schedule and performance benefits.***

N/A